Agency: Commerce, Community and Economic Development

Grants to Municipalities (AS 37.05.315)

Grant Recipient: Haines Borough

Project Title:

Haines Borough - Port Chilkoot Cruise Ship Dock Repairs and Debt Retirement

State Funding Requested: $ 1,543,700 **House District:** 5 - C

One-Time Need

Brief Project Description:

CRUISE SHIP FUNDING - The PC Dock is in need of major repairs on both the approach trestle and the main dock which is in addition to the work already done in 1987 and 1996 and includes replacing pile caps, cross bracing, stringers and some pilings.

Funding Plan:

Total Cost of Project: $1,543,700

Funding Secured		Other Pending Requests		Anticipated Future Need	
Amount	*FY*	*Amount*	*FY*	*Amount*	*FY*

There is no other funding needed

Detailed Project Description and Justification:

THIS IS A CRUISE SHIP IMPACT FUND SOURCE PROJECT.

The Haines Borough is highly impacted by cruise ship passenger traffic each year. Not only are they a port of call seeing one to two cruise ships a week, but they are also located 15 water-miles from Skagway which sees 5 to six cruise ships per day. Each day hundreds of passengers boat over to Haines from Skagway and embark on tours, shopping expeditions, and make use of the Borough's public facilities. Haines sees approximately 32,000 passengers just from Skagway alone.

Haines has an annual CIP program that attempts to address the impacts that these passengers have on the community. However, they are a small community and their fund sources are not large enough to keep up with the infrastructure needs that the cruise ship passengers create.

The Port Chilkoot Dock is a WW2-era timber structure and was recently inspected by PND Engineers and has need of major repairs on both the approach trestle and the main dock. Both of these projects are in addition to the work already done in 1987 and 1996 and includes replacing pile caps, cross bracing, stringers and some pilings. The abutment bulkhead is also in need of repair/replacement. Some of this work can be done in stages.

This dock is serious need of repair and will be a health and safety hazard if it does not see these repairs. It is imperative for the safety of the community as well as the thousands of cruise ship passengers that Haines sees each year that this dock be adequately maintained.

For use by Co-chair Staff Only:

Contact Name: Kaci Schroeder Hotch
Contact Number: 465-3306

4:56 PM 4/29/2008

Project Timeline:

Funding would be secured in July with construction to begin in the early spring of 2009.

Entity Responsible for the Ongoing Operation and Maintenance of this Project:

Haines Borough

Grant Recipient Contact Information:

Contact Name: Robert Venables, Haines Borough Manager
Phone Number: 907-766-2231
Address: P.O. Box 1209, Haines, AK 99827
Email: rvenables@haines.ak.us

Has this project been through a public review process at the local level and is it a community priority? [X] Yes [ ] No

Contact Name: Kaci Schroeder Hotch
Contact Number: 465-3306

For use by Co-chair Staff Only:

4:56 PM 4/29/2008

Kaci Schroeder

From: Robert Venables [rvenables@haines.ak.us]
Sent: Thursday, February 21, 2008 10:20 PM
To: Kaci Schroeder
Subject: cruise impacts

Representative Bill Thomas
State Capital Building
Juneau, Alaska

February 22, 2008

RE: Cruise Ship Impacts

Dear Representative Thomas,

Thank you for considering the impacts on Haines from the cruise ship passengers that disembark here from the Municipality of Skagway. Each year over 32,000 cruising passengers from large cruise ships docked in Skagway arrive in Haines via the privately owned fast-ferry that is operated by Chilkat Cruises. Even more come by plane. This number exceeds the total passengers that dock directly at our municipal-owned Port Chilkoot Dock. These 32,000 visitors arrive to take tours and walk through town and then have to go back to Skagway to return to their cruise ship. That puts a round-trip equivalent of 64,000 cruising passengers going through Haines each summer – on top of the 30,000 that do arrive here across the P.C. Dock. That is nearly 100,000 passenger trips across our docks and local infrastructure that Haines, as a small community, is not yet equipped to accommodate.

Haines does have an annual CIP program that tries to address the many community needs and infrastructure used by the many visitors that visit our community. Over the past two years, Haines has spent over $350,000 in local funds to support the cruise ship dock and other visitor amenities in our attempt to create and support a viable visitor industry that welcomes our cruise ship passengers from Skagway and other ports. Obviously our small community does not have the funds to address all the many needs that our visitor industry needs. Any assistance that could be given to assist us in our attempts to accommodate these cruising passengers is greatly appreciated.

Sincerely,

Robert Venables
Haines Borough Manager

Haines Borough
Borough Assembly Meeting #124
December 11, 2007

CERTIFICATION OF ASSEMBLY ACTION

Present: Deputy Mayor Jerry **LAPP** and other Assembly Members Doug **OLERUD**, Steve **VICK**, Deborah **VOGT**, Norm **SMITH**, and Pete **LAPHAM**. Absent: Mayor Fred **SHIELDS**.

2008 Legislative Priorities

Motion by **VICK**: Approve the 2008 Haines Borough Legislative Priorities. It was seconded by **VOGT**. The motion carried unanimously.

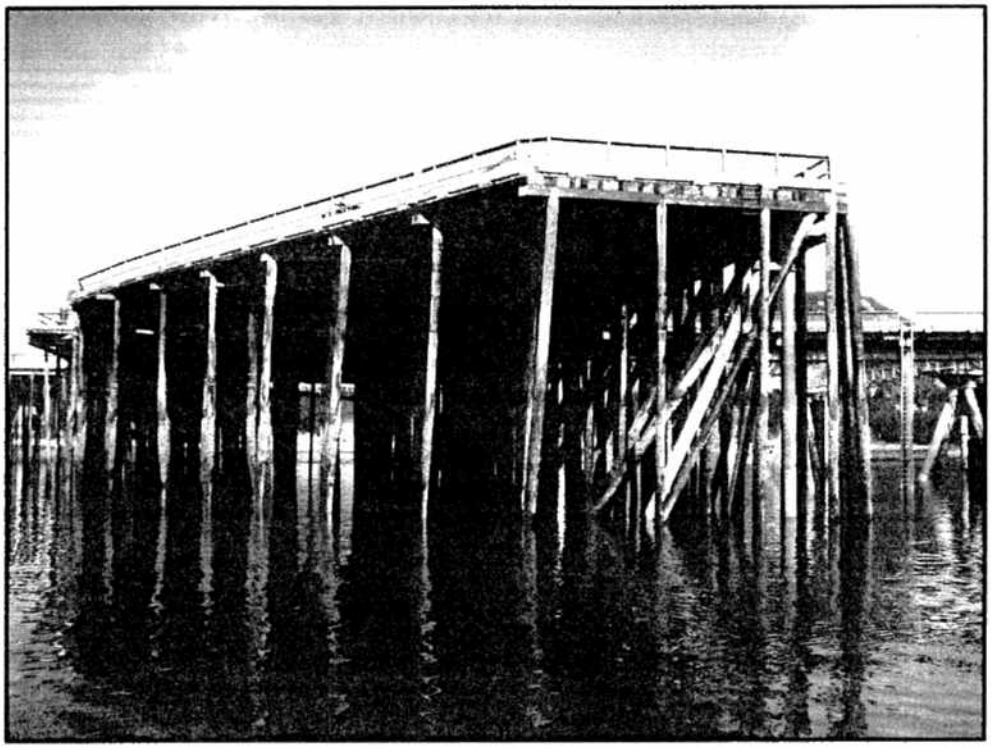
HAINES BOROUGH INCORPORATED SEAL OCTOBER 17 2002 STATE OF ALASKA

Attest:

Julie Cozzi

Julie Cozzi, Borough Clerk
Haines Borough, Alaska

PORT CHILKOOT DOCK CONDITION ASSESSMENT (PRE 1994 FACILITY)



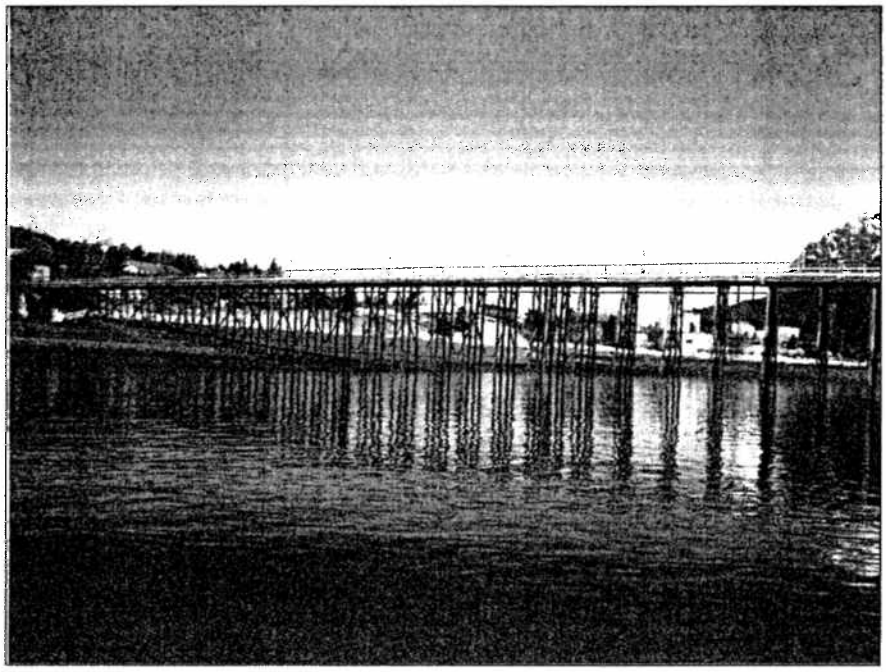
Haines Borough
P.O. Box 1209
Haines, Alaska 99827

Prepared by:

PND ENGINEERS, INC.
9360 Glacier Highway, Suite 100
Juneau, Alaska 99801
Phone: 907.586.2093 - Fax: 907.586-2099

May 4, 2007

PORT CHILKOOT DOCK
CONDITION ASSESSMENT



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Section 1

Inspection Report

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ENGINEERS, INC.

May 4, 2007 PND 062037.01

Mr. Robert Venables
Haines Borough Manager
P.O. Box 1209
Haines, Alaska 99827

Re: Port Chilkoot Dock Condition Assessment
Pre-1994 Facility

Dear Mr. Venables:

The following report is a summary of the condition assessment performed by PND Engineers, Inc. (PND) for the Pre-1994 section of the Port Chilkoot Dock. The report includes recommendations to address the conditions noted, and provides budgetary cost estimates for recommended repairs and/or replacement. Specific designs necessary for repair and/or replacement work are not included in this condition assessment scope.

OVERVIEW

The Port Chilkoot Dock (Pre-'94) is an ell-shaped timber structure, consisting of a 16-ft wide by 450-ft long approach trestle, and a 250-ft long main dock which varies in width from 35-ft to 150-ft. The structure is supported by creosote treated timber piles and framed with creosote treated 12x12 pile caps, 6x12 stringers and 3x12 decking. Pile caps are connected to each pile at approximately 11.5 feet on center with steel drift pins. Stringers are spaced at 2 feet on center, with every third stringer being connected to the pile cap with a steel drift pin. 6x12 blocking is installed between stringers, and is toe-nailed to the pile cap with 60d nails. Deck planks are oriented at 45° to the stringers, and are attached to each stringer with a pair of 3/8-inch spikes.

In 1987, renovations to the dock included new timber batter piles and fender piles along the dock face, new pile caps and stringers at various locations throughout the main dock, new 3x12 decking over the entire main dock, and new timber bullrail along both sides of the approach trestle. In 1996, as part of other dock improvements, new 3x8 cross bracing was installed at various locations along the approach trestle.

Several areas of the main dock have had pile caps, stringers and decking replaced with new materials over the course of the last ten years, including the major repairs completed in April 2006, as a result of damage from a forklift falling through the main dock.

INSPECTION

PND inspected the Port Chilkoot Dock (Pre-'94) on April 18th, 2007. Base maps where developed, with a grid numbering system, to organize and identify specific areas of the dock (see Section 2). Access beneath the dock was accomplished through the use of a boat and step ladder during a 20-ft high tide. A visual inspection was performed, and representative photos were taken of the facility's major structural components.

Approach Trestle:

The overall structural condition of the approach trestle is fair. The following conditions were observed:

Observations:

- The cross bracing at pile bents 3, 4, 5, 6, 13 and 14 have rotten and/or broken ends. Consequently, these cross braces no longer have an adequate structural connection to the piles, and thus do not provide the necessary lateral support for the trestle structure at these locations.
- The cross bracing at pile bent 20 is missing the mid-point blocking. Due to the length of the cross bracing, this blocking is necessary at the brace mid-point to prevent excessive deflection of the bracing. While the cross bracing at this location still offers some lateral capacity, the capacity is significantly reduced as a result of the missing blocking.
- The pile caps ends at bents 25, 26, 28, and 29 are split and deterioration of the wood has begun.
- Virtually all stringers and many pile caps have a moderate amount of fungal growth on them indicating that the original creosote treatment is no longer doing an adequate job of protecting the wood.
- There are depressions in the asphalt pavement at the trestle abutment indicating there has been settlement in the underlying fill contained by the timber bulkhead. A visual inspection of the bulkhead did not yield conclusive evidence as to the reason for the settlement.
- Pedestrian railing along the approach trestle is not code compliant.

Recommendations:

- Cross bracing is structurally critical for the approach trestle. It is recommended that the cross bracing identified above, and all related connection hardware, be replaced with new.
- Framing (i.e. stringers and pile caps) for the approach trestle is no longer being adequately protected by the creosote timber treatment. Consequently, deterioration of these timbers has already begun. It is recommended that a 5-year replacement plan be implemented for the approach trestle. Each year, a portion of the pile caps, stringers and decking should be replaced with new. All trestle pile caps, stringers and decking should be replaced with new, within 5 years.
- Design of the abutment bulkhead, as well as construction methods and materials used during installation, are all likely contributors to the resulting settlement of the contained fill. It is recommended that this area be monitored on an annual basis, particularly for signs that the cause for settlement is structurally related. If so, then the bulkhead will need to be replaced.
- It is recommended that the pedestrian railing along the approach trestle be upgraded so that it is code compliant. In addition, although not specifically addressed in the code, it is recommended that the top railing be the only horizontal component so that the rail system can not be climbed.

Main Dock:

While the overall condition of the main dock structural components is good, there are original design details and construction deficiencies that present potential safety concerns. Of primary concern are the pile cap splices. As designed, the pile caps end butt over a pile, with each pile cap being attached to the pile with a steel drift pin. However, because the diameter of timber piles vary greatly, and if the pile cap splice is not installed to be centered over the pile, the potential exists for an insufficient amount of pile-to-pile cap bearing area. If the top of the pile splits, which commonly happens with timber piles, or the dock is subjected to a large enough lateral load, the end of the pile cap could come off the pile. Several areas throughout the main dock exhibit this condition. The following conditions were observed:

Observations:

- Pile cap butt splices over piles 5L, 8K, 9K, 10K, 17C, 18G, and 19D have minimal bearing of the pile cap, and consequently have the potential for failure as discussed above.
- It is unclear whether or not 4x12 splice plates (on both sides of the pile cap splice) were included as part of the original pile cap splice design. Approximately 75% of the main dock has splice plates, while the remaining 25% of pile cap splices do not have splice plates.
- The tops of piles 4I, 5K, 8K, 9K, 11E, 15D, and 16F are split.
- The tops of piles 5K and 16F have been displaced but are still under the pile cap.
- The drift pin atop pile 5K has been torn out as a result of the displacement of this pile.
- The pile at location 18B is missing and consequently the pile cap at this location is spanning twice the distance it normally would.
- The pile cap near pile 11G is split with visible signs of some deterioration of the wood.
- Pedestrian railing along the main dock is not code compliant.

Recommendations:

- It is recommended that the pile cap splices identified above be retrofitted with a design similar to the one detailed for the April 2006, forklift repair work.
- It is recommended that a pile at location 18B be installed, or that the deck area above this location be blocked off from vehicle traffic.
- It is recommended that the pile cap near pile 11G be annually monitored for signs of further deterioration and eventually be replaced within 5 years.
- It is recommended that the pedestrian railing along the main dock be upgraded so that it is code compliant. In addition, although not specifically addressed in the code, it is recommended that the top railing be the only horizontal component so that the rail system can not be climbed.

Proposed Work Budget Estimates:

The following budgets pertain to the recommendations above. Major work items should be procured through competitive bid contracts, while miscellaneous, smaller scale work could be accomplished primarily using Haines Borough in-house work forces.

These budget estimates will be useful for general planning purposes, however more detailed cost breakdowns should be prepared as the project scope becomes further defined by the Haines Borough and final designs are completed.

Port Chilkoot Dock Trestle Maintenance Cost Estimate:

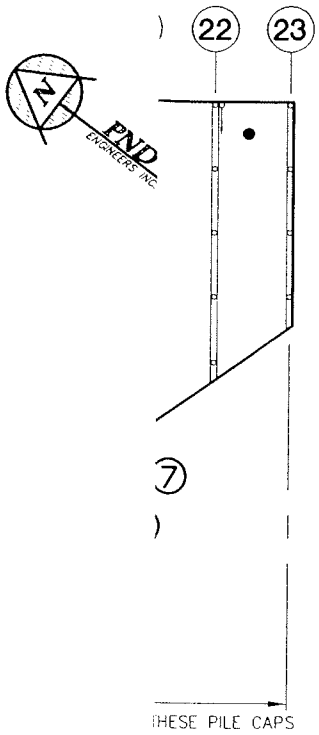
Item Description	Units	Quantity	Unit Cost	Amount
Mobilization	LS	All Reqd	10%	$47,120
Demo Existing Deck, Stringers & Pile Caps	LS	All Reqd	$35,000	$35,000
Supply and Install New Deck, Stringers and Pile Caps	S.F.	6,720	$60	$403,200
Supply & Install New 3x8 Cross Bracing	L.F.	240	$50	$12,000
Upgrade Pedestrian Railing	L.F.	840	$25	$21,000
Subtotal				**$518,320**
Contingency, Design, Permits,				$129,580
Inspect, Admin (25%)				
Total Recommended Project Budget				**$647,900**

Port Chilkoot Main Dock Maintenance Cost Estimate:

Item Description	Units	Quantity	Unit Cost	Amount
Mobilization	LS	All Reqd	10%	$6,240
Demo/Salvage/Reinstall Existing Deck	LS	All Reqd	$20,000	$20,000
Supply & Install New 3x12 Pile Cap Splice Plates	EA	7	$1,200	$8,400
Supply & Install New 6x12 Pile Side Bearing Plates	EA	7	$2,000	$14,000
Upgrade Pedestrian Railing	L.F.	800	$25	$20,000
Subtotal				**$68,640**
Contingency, Design, Permits,				$17,160
Inspect, Admin (25%)				
Total Recommended Project Budget				**$85,800**

Section 2

Base Maps



PND ENGINEERS INC.

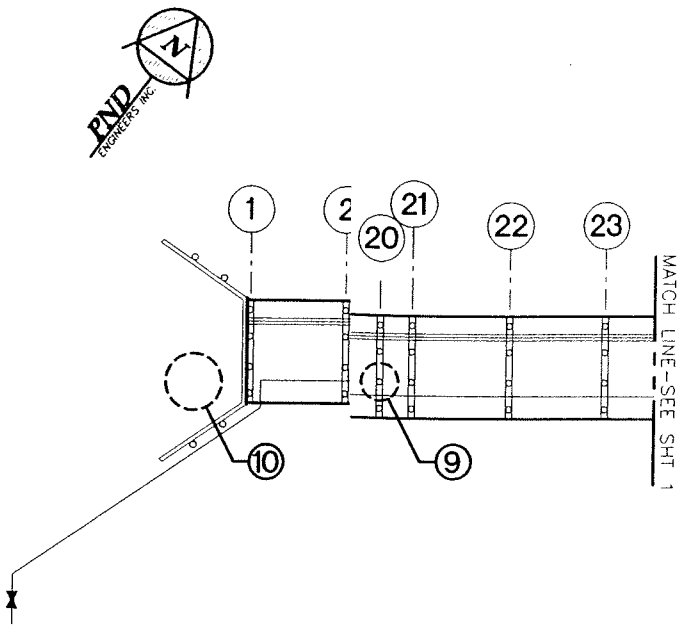
/4/07

HAINES BOROUGH, ALASKA
PORT CHILKOOT DOCK
CONDITION ASSESSMENT

SHEET TITLE:
DOCK PLAN

PN&D PROJECT NO.: 062037.01 | DWG. FILE:

SHEET 1 OF 2



HAINES BOROUGH, ALASKA

PORT CHILKOOT DOCK CONDITION ASSESSMENT

SHEET TITLE:

TRESTLE PLAN

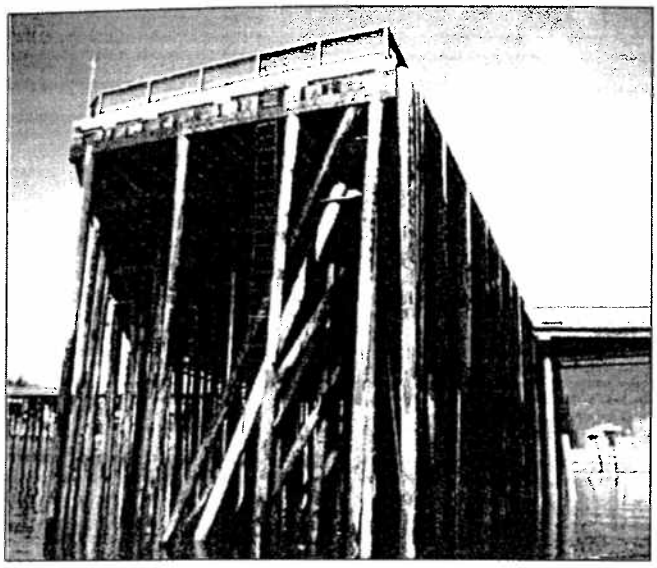
/4/07

PM&D PROJECT NO.: 062037.01 | DWG. FILE:

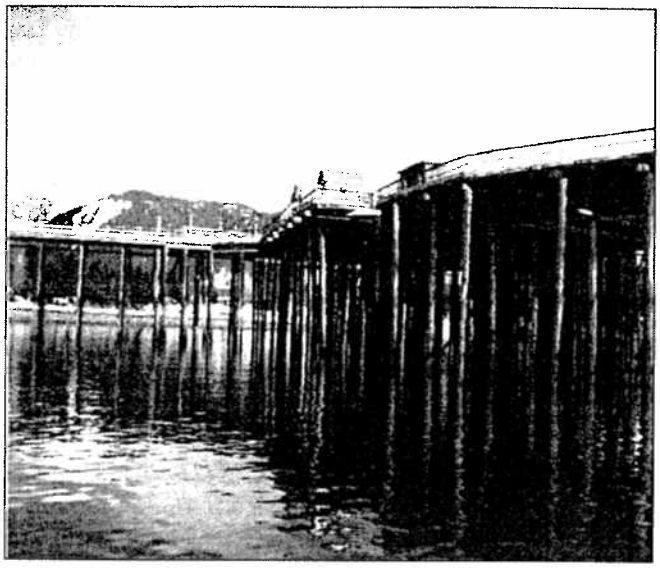
SHEET 2 OF 2

Section 3

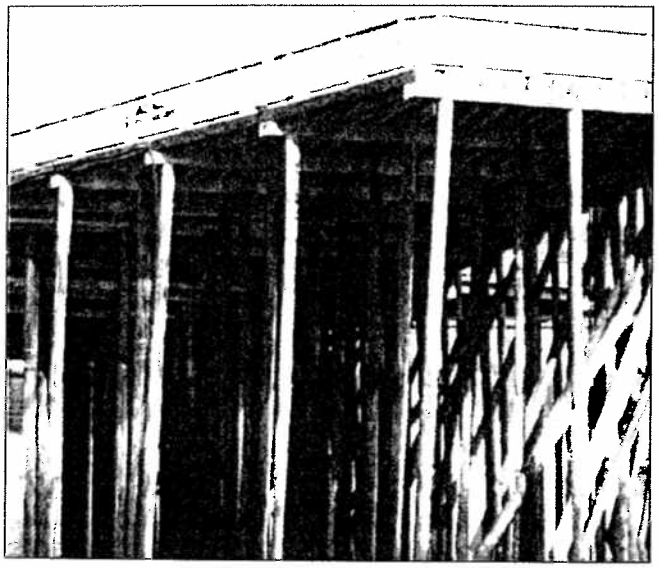
Photographs



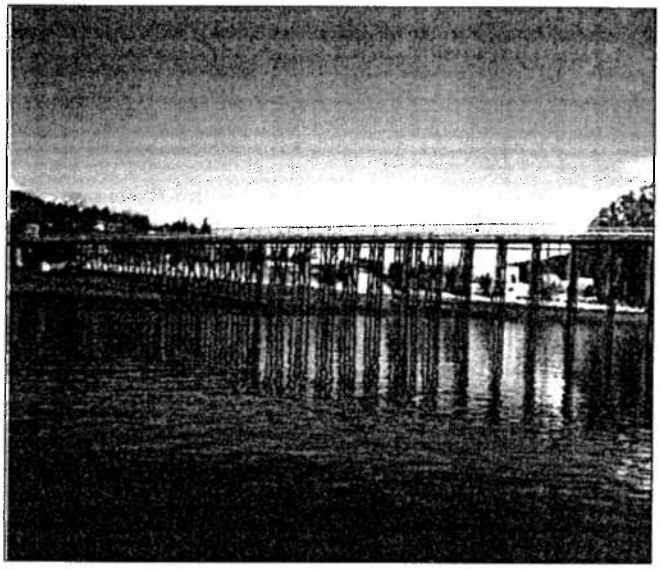
South end of dock, looking north.



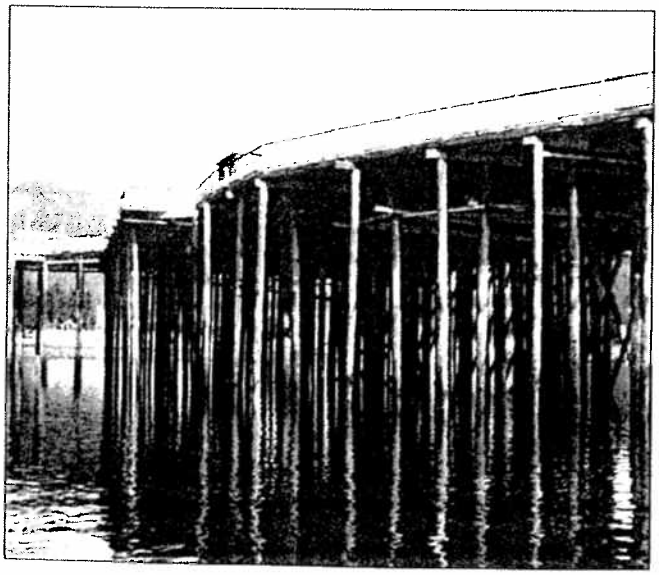
Back side of dock and trestle intersection, looking north.



South west (angled) side of dock, looking north.

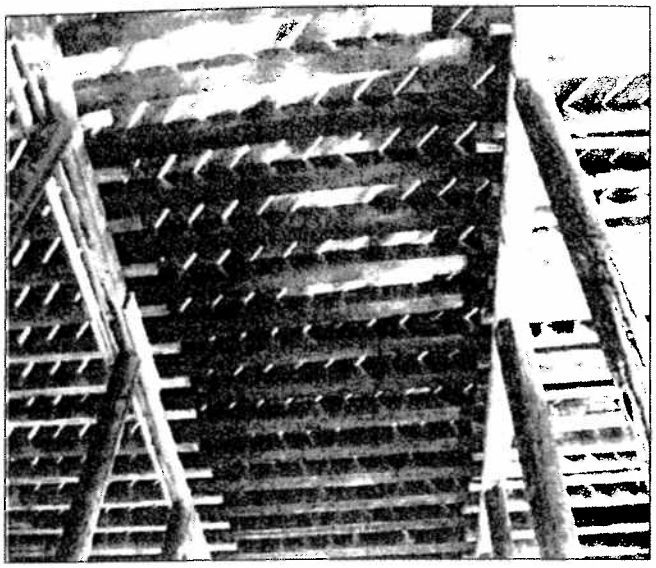


Approach trestle, looking west toward shore.



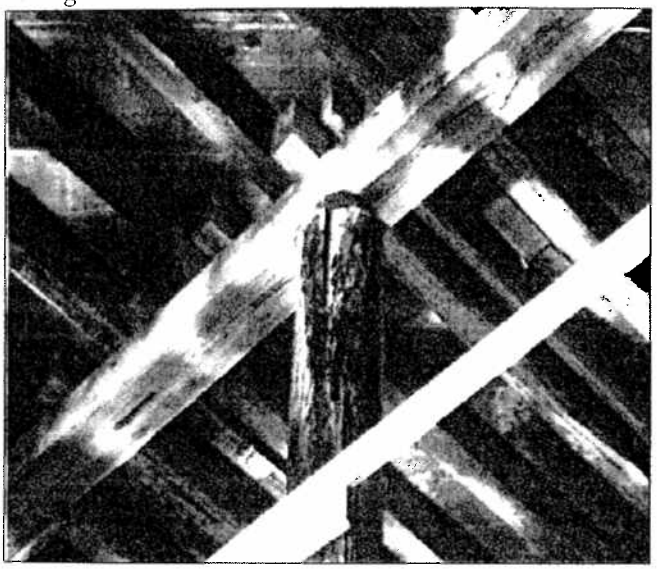
Backside of dock, looking north.

New pile cap at pile bent 17, grids E thru K. New stringers and decking for repair of 2006 forklift damage.

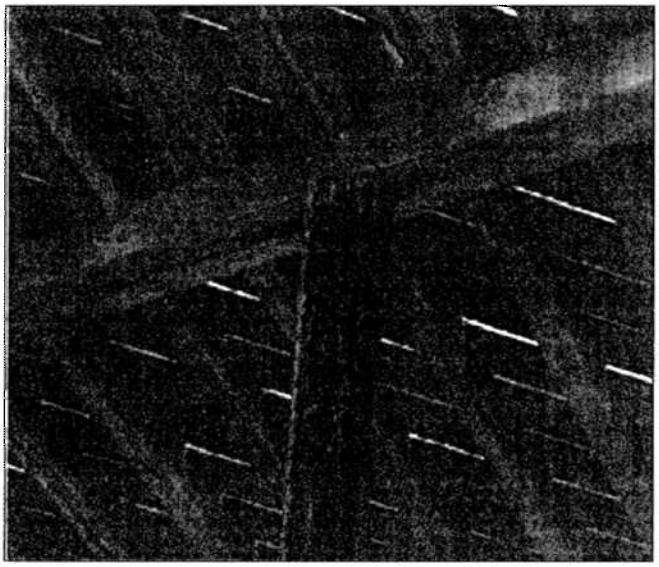


New 10 x 12 stringers installed between bents 16 and 17 and grids A thru E.

New stringers between pile bents 16 and 17.

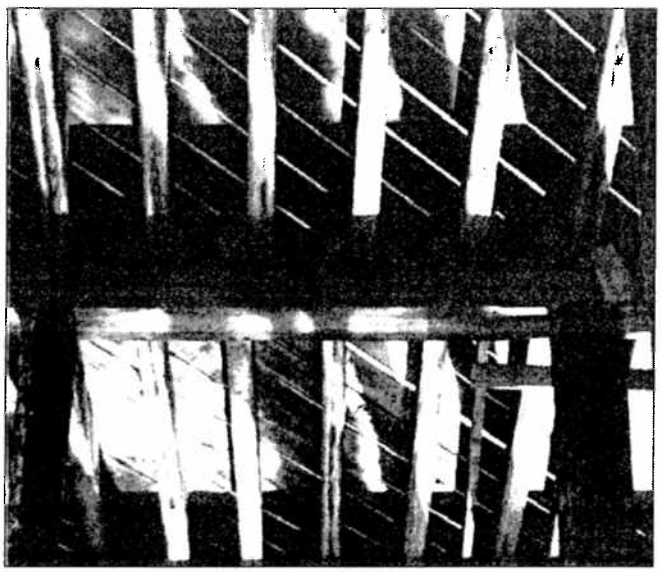


Pile 16-F split at top and displaced from centerline of cap.

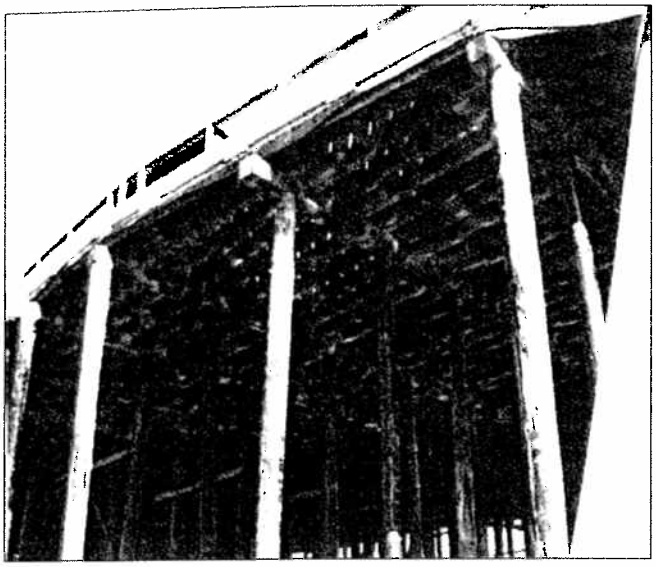


Pile 15-D split at top.

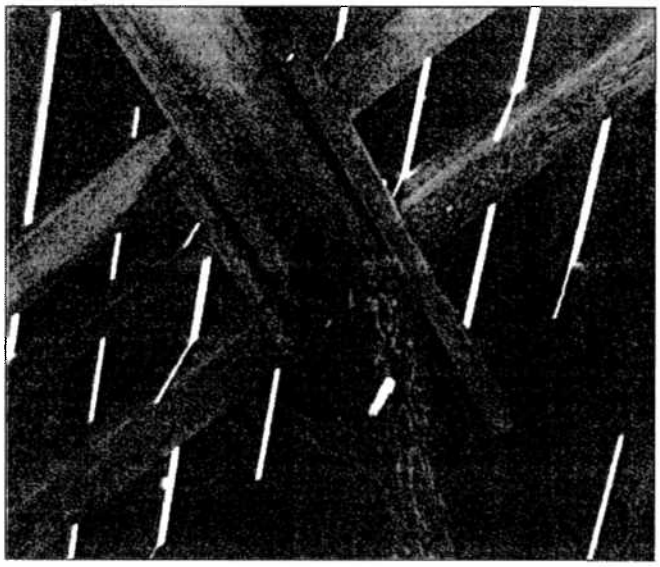
Pile cap butt splice at 17-C. Splice plate one side only, minimal bearing of cap.



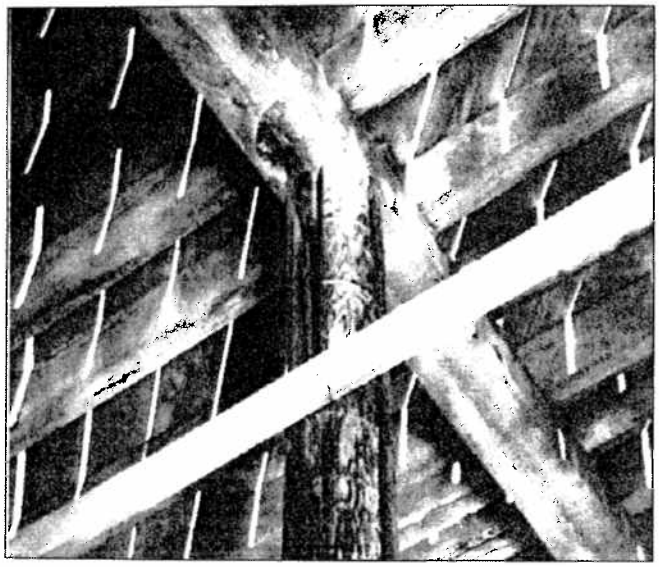
Pile cap between 19E and 19D. No splice plates and minimal bearing of pile cap.



Pile caps, stringers at back side of dock.

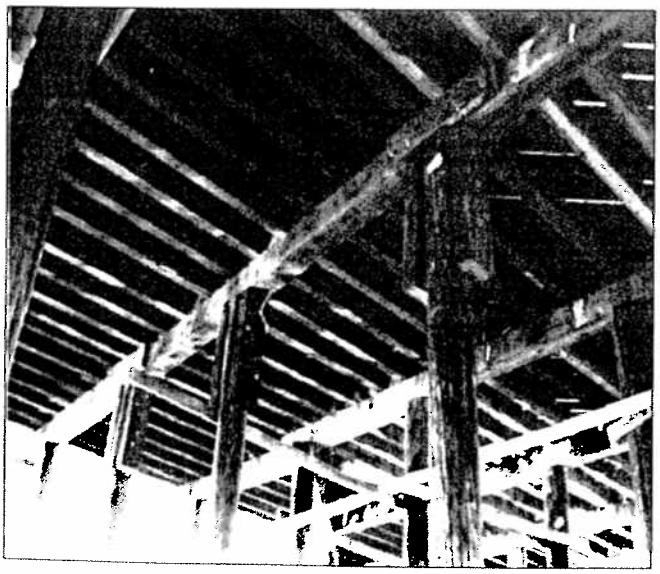


Pile cap at pile 11-G split. Splice plates not attached properly.

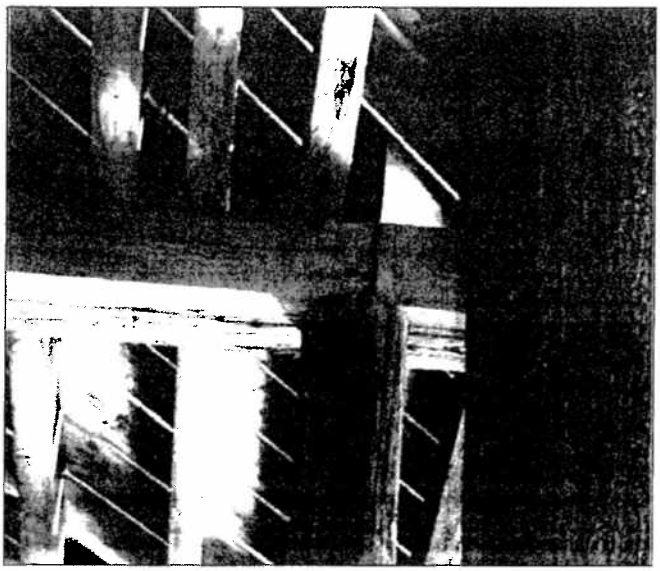


Pile 5-K drift pin torn out of pile. Pile displaced approximately 12 inches parallel to cap.

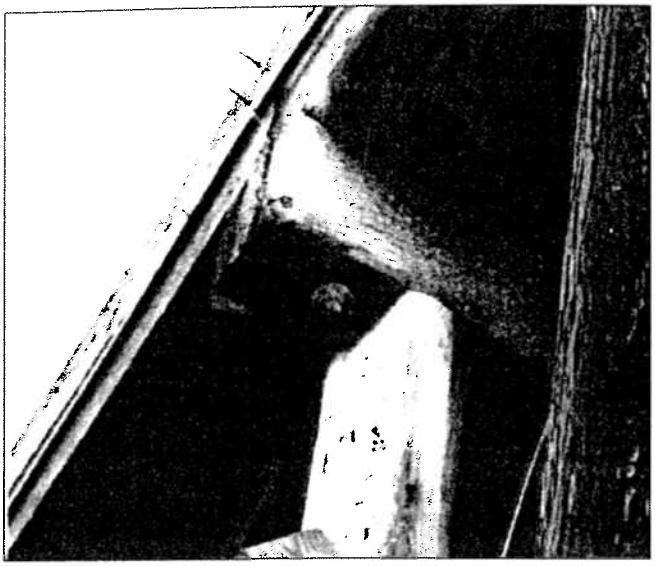
Pile 5-C cap butt splice with no splice plates and minimal bearing.



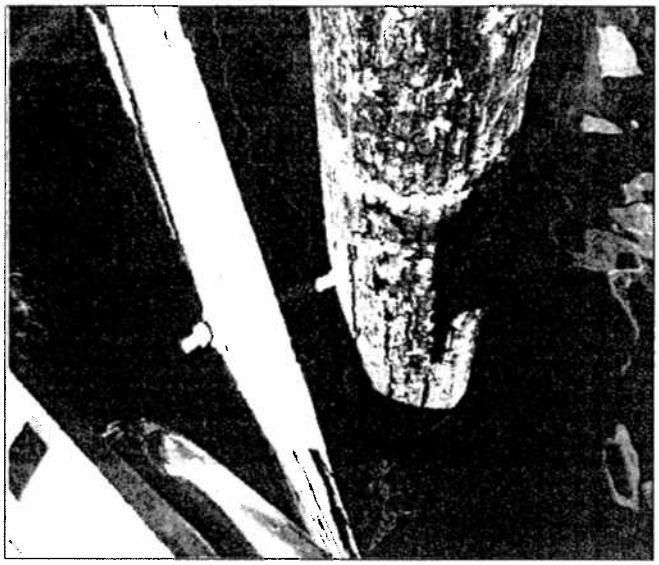
New pile cap at bent 7, grids I, J and K, with new splice plates and bearing plates.



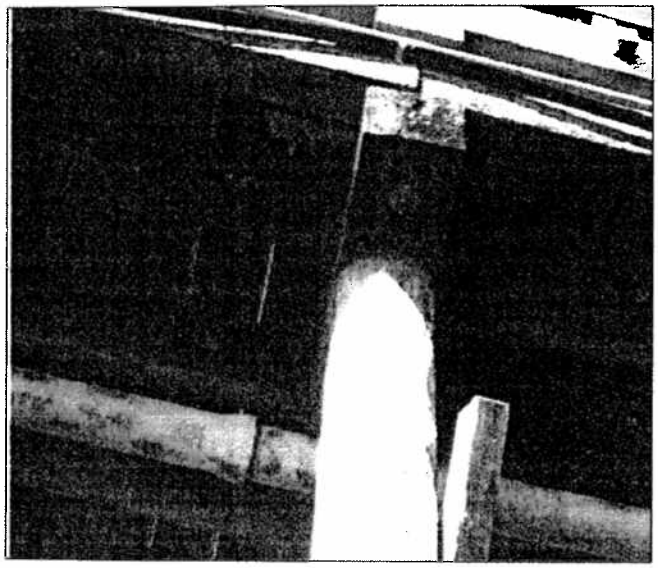
Pile 9-K cap splice. No splice plates, and minimal bearing.



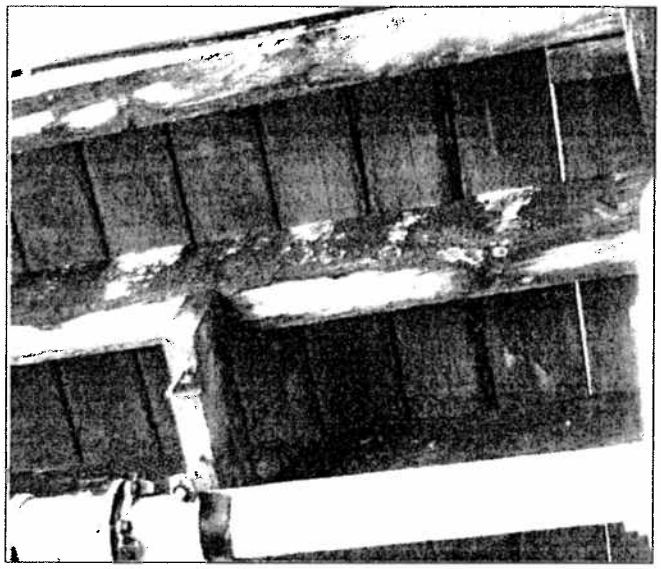
Typical split pile cap end with start of rot. Trestle bents 25, 26, 28 and 29.



Missing cross brace blocking at trestle bent 20, grid C.

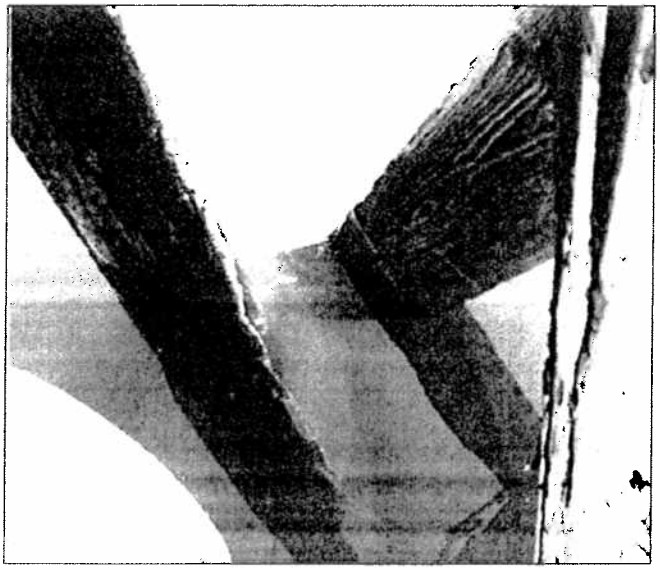


Typical split pile cap end with start of rot. Trestle bents 25, 26, 28 and 29.

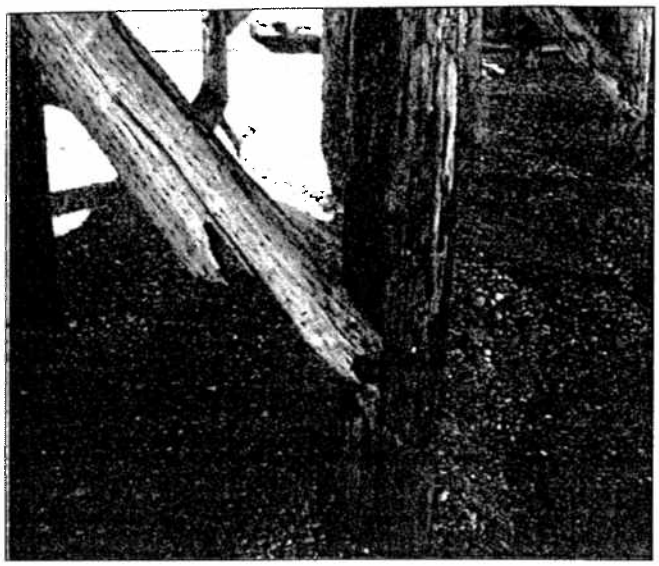


Typical fungus growth on trestle stringers.

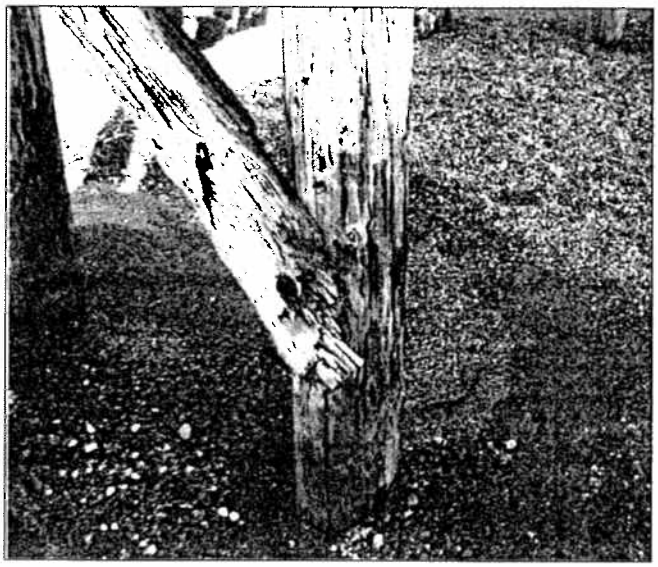
Rotten end of cross bracing at trestle bent 13.



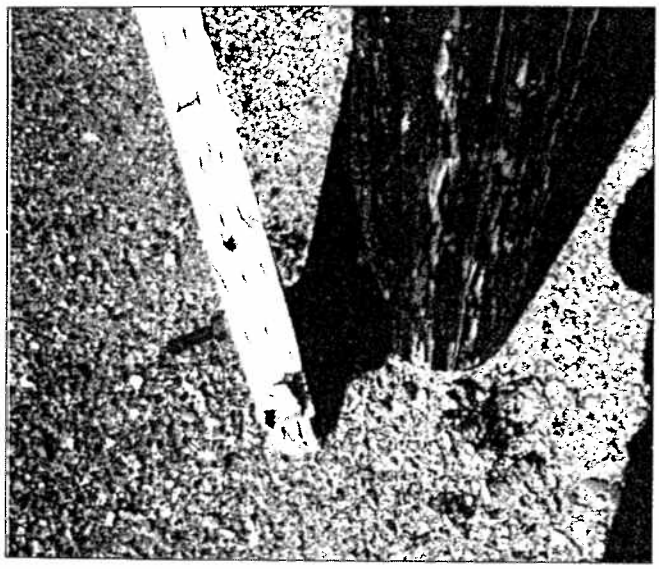
Rotten end of cross bracing at trestle bent 14.



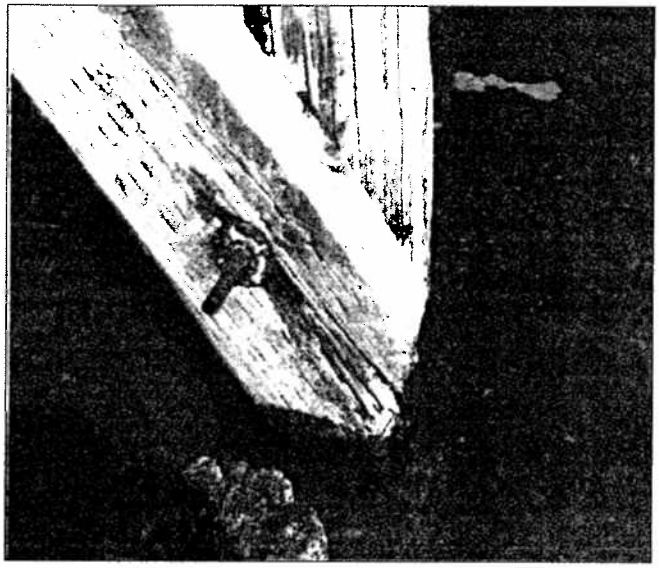
Rotten/broken cross bracing at trestle bent 4.



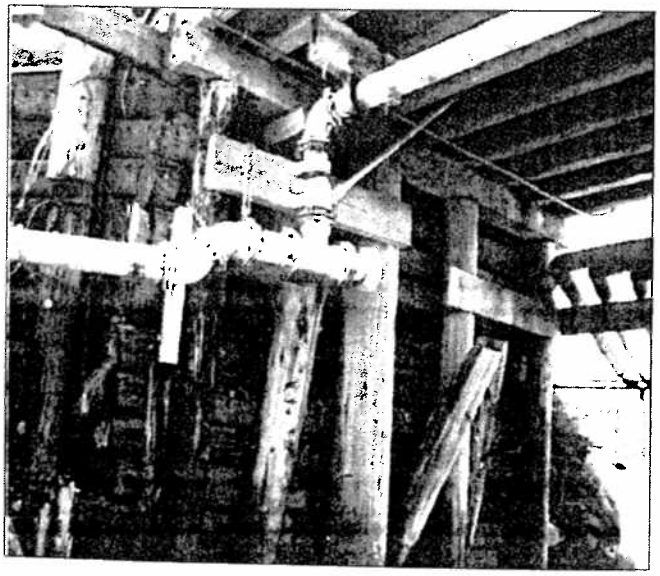
Rotten/broken cross bracing at trestle bent 3.



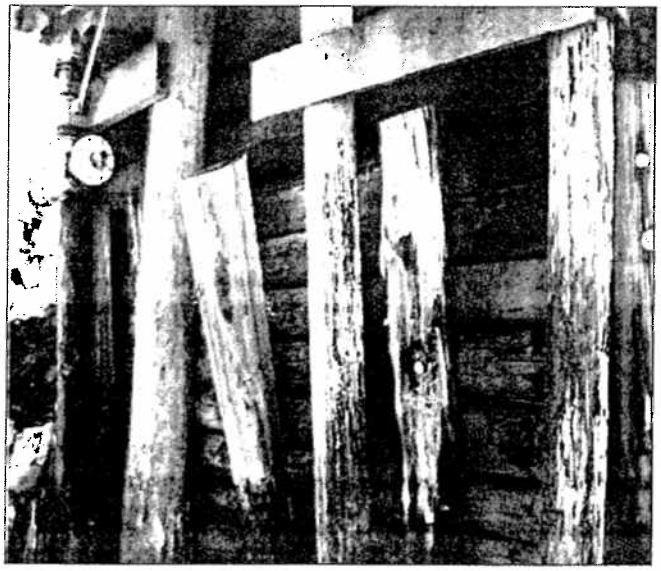
Rotten/broken cross bracing at trestle bent 5.



Rotten/broken cross bracing at trestle bent 6.



Piles and pile cap at trestle abutment.



Piles and pile cap at trestle abutment.